time, or experience needed to provide appropriate and sensitive care to this population.

Torture treatment centers offer an environment in which educated dental professionals sensitive to the needs of torture survivors can provide oral health services without the risk of retraumatization, or a referral can be made to a dentist who understands the needs of these individuals. However, although there are approximately 30 torture treatment centers in the United States, only the Boston center provides oral health services. Our results offer strong evidence of the special dental needs of trauma victims and support implementing oral health programs at torture treatment centers. ■

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This brief was accepted January 7, 2008.

Contributors

H.K. Singh supervised all aspects of the study and led the writing of the article. T.E. Scott synthesized the analyses and assisted with the writing. M.M. Henshaw originated the study, helped to conceptualize ideas, and reviewed drafts of the article. S.E. Cote assisted with the writing and reviewed drafts of the article. M.A. Grodin and L.A. Piwowarczyk originated the study and reviewed drafts of the article.

Acknowledgments

This work was supported in part by the Northeast Center for Research to Evaluate and Eliminate Dental Disparities and by the National Institute of Dental and Craniofacial Research (grant U54 DE14264) and the National Center on Minority Health and Health Disparities.

Human Participant Protection

This study was approved by the institutional review board of the Boston University Medical Center.

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Discharge Planning and Continuity of Health Care: Findings From the San Francisco County Jail

Emily A. Wang, MD, Mary C. White, PhD, MPH, RN, Ross Jamison, MPA, Joe Goldenson, MD, Milton Estes, MD, and Jacqueline P. Tulsky, MD

Continuity of health care among the formerly incarcerated is an emerging public health challenge. We used data from the San Francisco County Jail to determine whether discharge planning improves access to care on release. Inmates who were HIV positive and received discharge planning were 6 times more likely to have a regular source of care in the community compared with inmates with other chronic medical conditions, and they were as likely to have a regular source of care compared with the general San Francisco population. (*Am J Public Health.* 2008;98:2182–2184. doi:10.2105/AJPH.2007.119669)

Inmates with chronic medical conditions experience discontinuity of health care on release despite the risk of serious health outcomes.[1,2] Of those released from jail, 90% lack insurance or financial resources for medical care.[3–5] Although incarceration presents an opportunity to link inmates to health care on release, most are released without medical appointments. This discontinuity may lead to poor health outcomes, duplication of health care services, and recidivism.[6] We sought to compare inmates' access to care with and without discharge planning. Because the San Francisco County Jail offers discharge planning for inmates who are HIV positive, including coordination of primary care and social services, we hypothesized that persons with HIV were more likely to identify a regular source of care compared with those without this service.

METHODS

The ACCESS study is a cross-sectional study of people incarcerated in San Francisco County Jail, which averages a daily population of 2000 inmates and 55 000 bookings per year.[7] From March 2005 to January 2006, we interviewed 347 English-speaking adults. Because ACCESS focused on health care use by inmates who were HIV positive, they were oversampled. Every inmate who was identified as HIV positive within the study time frame, identified through the San Francisco County Jail electronic database, was asked to participate. A systematic sample of inmates not identified as HIV positive was recruited as a comparison group.

Trained personnel conducted private interviews in San Francisco County Jail. Participants were asked about sociodemographic variables; history of homelessness, substance abuse,[8] and incarceration; health status[9]; and history of chronic disease, including hypertension, cardiovascular disease, diabetes, emphysema, asthma, hepatitis, kidney disease, cancer, and seizure disorder. Participants were categorized as (1) HIV positive, (2) having another chronic disease and no known HIV infection, or (3) having neither known HIV infection nor another chronic disease. Because being HIV positive entitled inmates to discharge planning, those with HIV were analyzed

TABLE 1—Sample Characteristics of Jail Inmates, by Chronic Disease Status: ACCESS Study, San Francisco County, March 2005

	HIV	Chronic Disease Other Than HIV	No Chronic Disease
Total, No. (%)	181 (100)	102 (100)	64 (100)
Age, y, mean ± SD (range)	41.5 ± 8.5 (18–63)	38.2 ± 11.2 (18–63)	34.2 ± 8.0 (18–50)
Gender, No. (%)			
Men	162 (90)	83 (81)	58 (91)
Women	19 (10)	19 (19)	6 (9)
Race/Ethnicity, No. (%)			
White	52 (29)	17 (17)	15 (23)
Black	87 (48)	56 (55)	29 (45)
Non-White Hispanic	8 (4)	4 (4)	8 (13)
Other	31 (17)	24 (24)	12 (19)
Education, No. (%)			
Less than high school	56 (31)	31 (30)	15 (23)
High school graduate	80 (44)	41 (40)	31 (48)
Some college or more	44 (24)	30 (29)	18 (28)
Marital status, No. (%)			
Married or living with a partner	24 (13)	15 (15)	15 (23)
Divorced, separated, or widowed	55 (30)	33 (32)	15 (23)
Single	102 (56)	55 (54)	24 (38)
Income the month prior to incarceration, $, median (IQR)	860 (500–1200)	1000 (422–2500)	878 (255–2000)
Insurance, No. (%)			
Medi-Cal	104 (57)	18 (18)	7 (11)
Medicare	28 (15)	4 (4)	4 (6)
Other (Department of Veterans Affairs benefits, private)	15 (8)	13 (13)	16 (25)
None	49 (27)	53 (52)	39 (61)
Ever homeless, No. (%)	160 (88)	81 (80)	43 (67)
History of drug abuse,[a] No. (%)	163 (90)	89 (87)	46 (72)
Days in jail this year, median (IQR)	60 (15–180)	60 (17–180)	50 (8–180)
Times in jail, No. (%)			
1–5	51 (28)	30 (29)	24 (38)
≥6	115 (64)	67 (66)	37 (58)
Cannot remember	7 (4)	5 (5)	3 (5)
Health status			
Physical Functioning Scale,[b] Score ± SD	66 ± 31	84 ± 24	95 ± 12
Regular source of care, No. (%)	152 (84)	46 (45)	24 (38)

[a]Positive responses were those who responded "yes" to 2 or more questions on the CAGE questionnaire, adapted to include drugs.
[b]Measured with the RAND Corp SF-36, Physical Functioning Scale. The scores range from 0 to 100, and a higher RAND Corp SF-36 physical functioning score correlates with improved health status.

together regardless of their chronic disease status. Participants were categorized as having a regular source of care if they answered: "I go to 1 place and see the same provider(s)."

We performed bivariate and multivariate analyses to investigate characteristics associated with having a regular source of care. The sample was weighted according to the 2001 prevalence of HIV in San Francisco County Jail.

We compared age-, gender-, ethnicity-, and insurance-specific proportions of inmates with a regular source of care for each of the 3 disease categories with the proportions reported in the California Health Interview Survey, a telephone survey of the Californian civilian population.[10] We used indirect methods to calculate standardized morbidity ratios of the number observed compared with the number expected if our sample had the California Health Interview Survey rates of access to care.[11]

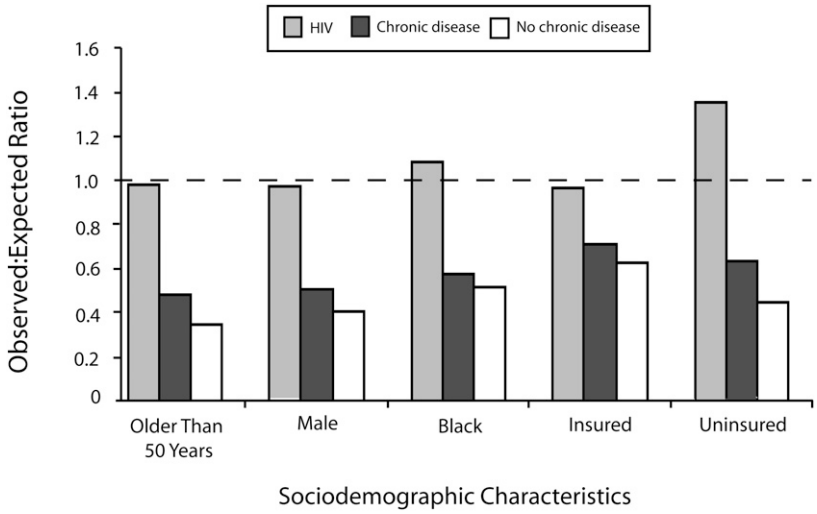
RESULTS

Of the 451 inmates approached for participation, 347 were enrolled (Table 1). Inmates who were HIV positive had a 6-times greater odds of identifying a regular source of care compared with inmates with other chronic medical conditions (odds ratio [OR]=6.38; 95% confidence interval [CI]=3.65, 11.14) and a 10-times greater odds of having a regular source of care compared with inmates with neither HIV nor another chronic disease (OR=10.61; 95% CI=4.61, 24.4). This association persisted in multivariate analysis after we adjusted for factors associated with having regular care, including age, marital status, insurance, and health status.

In comparison with the California Health Interview Survey data on the 2005 general San Francisco population, inmates with chronic medical conditions other than HIV were less likely to have a regular source of care (Figure 1). No significant differences were seen in access to care for inmates who were HIV positive compared with the general population, with the exception of the uninsured. Uninsured inmates with HIV were 1.3 times as likely to have a regular source of care compared with the general uninsured population.

DISCUSSION

We found that San Francisco County Jail inmates who received discharge planning—namely, inmates who were HIV positive—were more likely to have a regular source of care than were inmates who did not receive this service. Although comprehensive health care for inmates who are HIV positive is



Note. Access to care of the general San Francisco population is represented by the dashed black line, which is assigned a value of 1.0 for comparisons with inmates' access to care. Standardized morbidity ratios for sociodemographic groups (older than 50 years, male, Black, insured, and uninsured) compare jail inmates' access by chronic disease status with that of the general San Francisco population, with interpretations similar to those for odds ratios.

FIGURE 1—Access to community care of San Francisco County Jail inmates, by chronic disease status, compared with the general population by selected sociodemographic characteristics: ACCESS Study, San Francisco, Calif, 2005

considered a matter of public health, providing discharge planning to inmates with other chronic conditions may improve their health care access as well. HIV discharge planning exemplifies how jailed adults can be successfully connected to care in the community with targeted efforts.

Our study had several limitations. Because it was cross-sectional, no conclusions could be made about cause and effect. We relied on self-report for measurement of chronic disease and did not obtain information on nonresponders, increasing the potential for recall and volunteer bias. By limiting enrollment to English-speaking adults, we could not generalize study results to non–English-speaking people.

Despite having a regular source of care, 42% of the inmates in this study reported interruptions in care when transitioning between jail and the community. Although human factors may contribute to discontinuity, it raises the question of whether other health care system strategies in addition to discharge planning would be more successful in ensuring continuity of care. Health care models in which providers follow-up their patients through the correctional system or in which jail health is integrated into the public health care system may lead to improved health outcomes for patients.[12,13] ■

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This brief was accepted September 23, 2007.

Contributors

E.A. Wang originated this research question and participated in the analysis of data and writing of the brief. M.C. White originated the study, developed the questionnaire, participated in the writing of the brief, and supervised data analysis. R. Jamison originated the study, developed the questionnaire, and participated in data collection. J.P. Tulsky originated the study, developed the questionnaire, participated in data collection, and supervised the writing of this brief. J. Goldenson and M. Estes originated the study and coordinated data acquisition.

Note. J.P. Tulsky and E.A. Wang had full access to all of the data in the study and take responsibility for the integrity of the data and accuracy of the data analysis.

Acknowledgments

Research was supported by the National Institutes of Health (grant RO1 DA13892) and the National Research Service Award Research Training Grant in General Internal Medicine to University of California, San Francisco (grant T32 HP 19025).

We appreciate the assistance of the San Francisco County Jail Health Services and the Sheriff's Department deputies and staff.

Human Participant Protection

This study was approved by the University of California's institutional review board.

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